

CLAIMS

The invention claimed is:

1. A device for removing waste from a blank, said device comprising:

a rotatable cylindrical stripping pin housing, said stripping pin housing defining a plurality of grooves in one of its axial surfaces, with each groove having an aperture in the circumferential surface of said stripping pin housing, each of said grooves containing a stripping pin apparatus, said stripping pin apparatus including a stripping pin oriented to extend through said aperture and a cam follower extending from said axial surface; and

a stationary cam, said cam defining a cam track in an axial surface;

wherein said housing is positioned adjacent to said cam profile so that said cam followers extend into and are securely positioned in said cam track; and

wherein said cam track is defined so that when a cam follower travels around said cam track the stripping pin coupled to said cam follower extends past circumferential surface and then retract below said circumferential surface.

2. The device of claim 1 further including a rotatable drive shaft, s coupled to said stripping pin housing.

3. The device of claim 2 further including a stripping pin housing hub wherein said stripping pin housing hub is utilized to couple said drive shaft to said stripping pin housing.

4. The device of claim 2 further including a motor coupled to said drive shaft, said motor operable to rotate said drive shaft.

5. The device of claim 1 further including a cam lock coupled to said cam profile.

6. The device of claim 5 further including a stationary cam lock shaft coupled to said cam lock.

7. The device of claim 1 wherein said cam is a cylinder.

8. The device of claim 1 wherein said stripping pins extend from said circumferential surface for one half of said circumferential surface.

9. The device of claim 1 wherein said stripping pins extend from said circumferential surface for one quarter of said circumferential surface.

10. A device for removing waste from a blank, said device comprising:

a rotatable cylindrical stripping pin housing, said housing defining a plurality of grooves in one axial surface, with each groove including an aperture defined in the circumferential surface of said stripping pin housing, each of said grooves containing a stripping pin apparatus, said stripping pin apparatus including a stripping pin oriented to extend through said aperture and a cam follower extending from said axial surface;

a cam, said cam defining a cam track in an axial surface;

means for rotating said stripping pin housing; and

means for maintaining said cam in a stationary position;

wherein said stripping pin housing is positioned adjacent to said cam so that said cam followers extend into and are securely positioned in said cam track; and

wherein said cam track is defined so that when a cam follower travels around said cam track the stripping pin coupled to said cam follower extends past circumferential surface and then retract below said circumferential surface.

11. The device of claim 10 wherein said means for rotating said stripping pin housing includes a motor.

12. The device of claim 11 wherein said means for rotating said stripping pin housing further includes a drive shaft coupled to said motor and to said housing.

13. The device of claim 12 wherein a stripping pin housing hub is utilized to couple said stripping pin housing to said drive shaft.

14. The device of claim 10 wherein said means for maintaining said cam in a stationary position includes a cam lock shaft.

15. The device of claim 14 wherein said means for maintaining said cam in a stationary position further includes a cam lock coupled to said cam and said cam lock shaft.

16. The device of claim 10 wherein said cam is a cylinder.

17. The device of claim 10 wherein said stripping pins extend from said circumferential surface for one half of said circumferential surface.

18. The device of claim 10 wherein said stripping pins extend from said circumferential surface for one quarter of said circumferential surface.

19. A system for creating a blank from a sheet of material, said system comprising:

a cutting device, said cutting device operable to cut said sheet of material into a blank portion and a waste portion; and

a waste removal device, said device including a rotatable cylindrical stripping pin housing, said housing defining a plurality of grooves, with each groove having an aperture in the circumferential surface of said housing, each of said grooves containing a stripping pin apparatus, said stripping pin apparatus including a stripping pin oriented to extend through said aperture and a cam follower extending from said axial surface, and a stationary cam, said profile defining a cam track in an axial surface;

wherein said stripping pin housing is positioned adjacent to said cam so that said cam followers extend into and are securely positioned in said cam track; and

wherein said cam track is defined so that when a cam follower travels around said cam track the stripping pin coupled to said cam follower extends past circumferential surface and then retract below said circumferential surface.

20. The system of claim 19 further including a conveying device operable to carry said sheet of material to said cutting device.

21. The system of claim 19 further including a conveying device operable to carry said blank portion and said waste portion from said cutting device to said waste removal device.

22. The system of claim 19 further including a rotatable drive shaft, said drive shaft coupled to said stripping pin housing.

23. The system of claim 22 further including a stripping pin housing hub wherein said stripping pin housing hub is utilized to couple said drive shaft to said stripping pin housing.

24. The system of claim 22 further including a motor coupled to said drive shaft, said motor operable to rotate said drive shaft.

25. The system of claim 19 further including a cam lock coupled to said cam.

26. The system of claim 25 further including a stationary cam lock shaft coupled to said cam lock.

27. The system of claim 19 wherein said cam is a cylinder.

28. The system of claim 19 wherein said stripping pins extend from said circumferential surface for one half of said circumferential surface.

29. The system of claim 19 wherein said stripping pins extend from said circumferential surface for one quarter of said circumferential surface.